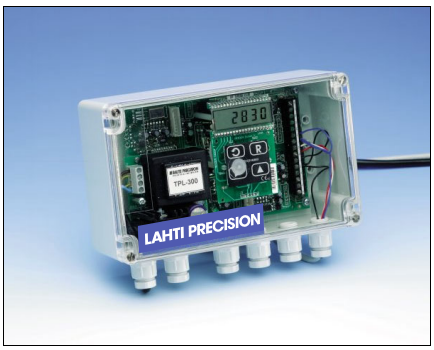


TPL-300
DIGITAL LOAD CELL AMPLIFIER FOR FIELD INSTALLATION

Silo and tank weighing, level monitoring

The digital TPL-300 load cell amplifier can be used with all types of strain gauge load cells in weighing and force measurement.
Amplifier calibration and output operations defining are done through the built-in programmer or via an external programming device. Calibration is done simply at two points (e.g. 0 and max) by entering the respective loading data in the memory of the device. Set points are entered by using a programmer, and preact value, hysteresis and latching functions can be linked to them.
Auto tare and peak hold can be activated through external volt-free contact closures.

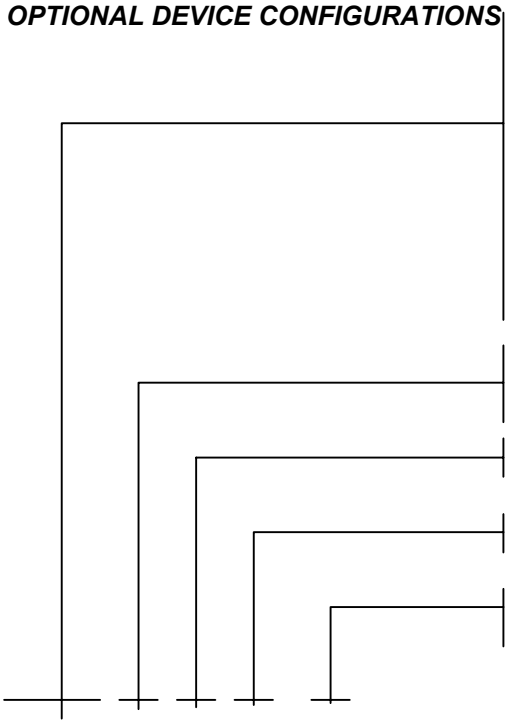
- **Accuracy 0.05**
- **Calibration by programmer keys**
- **Galvanically isolated outputs: 4 – 20 mA and 0 - 10 VDC**
- **Auto tare**
- **Peak hold**
- **Set point relays**
- **Case: plastic, die-cast, or stainless steel, protection class IP65**

LAHTI PRECISION

TPL-300 TECHNICAL DATA

Accuracy	Accuracy class: 0.05 Internal resolution: 32000 Drift: 20 ppm / °C @ 2,5 mV/V Speed: 10 readings /s
Environmental conditions	Operating temperature: -10…+50 °C
Input voltage	230 VAC –15 …+10%, 50/60 Hz 10 VA 115 VAC –15 …+10%, 50/60 Hz 10 VA 12 – 24 VDC 10 VA
Load cell interface	9.6 V (max 160 mA), e.g. 6 pcs / 350Ω load cells Cabling: 4- or 6-wire connection
Analogue output	Galvanically isolated 4 – 20 mA (max 1 kΩ) and 0 – 10 V (max 2 mA) Output inversion selectable Adjustable digital filtering
Set points	2 set point relays, 230 VAC, 5A, latching and inversion options Preact value and hysteresis setting possibilities
Serial interface	Current loop 20 mA, RS-232, RS-485, baud rates 300 – 9600
Programmer	Built-in (LP1), includes LCD-display 4.5 decades, height 9 mm Hand-held (LP2), size 60 x 120 x 25 mm, LCD-display 4.5 decades, height 9 mm, cable 1,9 m
Directive	Conforms to EMC-directive 89/336/EEC and low-voltage directive 73/23/EEC
Mechanical construction	**TPL-300:** light-grey ABS case, protection class: IP 65 Case dimensions: width 200 mm, height 120 mm, depth 75 mm Cabling: to 2.5 mm screw connectors through bushings Weight: 780 g **TPL-300C:** die-cast case, protection class: IP65, case dimensions: 220 x 120 x 80 mm **TPL-300S:** stainless steel case, protection class IP65, case dimensions: 220 x 160 x 85 mm

OPTIONAL DEVICE CONFIGURATIONS



TPL-300 Device with analogue outputs 4 – 20 mA and 0 – 10 V in plastic case (200 x 120 x 75 mm)

TPL-300T Device with analogue output 4 – 20 mA and 0 – 10 V in plastic case (200 x 120 x 75 mm), with see-through lid
(for use with built-in programmer/display device LP1)

TPL-300C Device with analogue output 4 – 20 mA and 0 – 10 V in die-cast case (220 x 120 x 80 mm)

TPL-300S Device with analog output 4 – 20 mA and 0 – 10 V in stainless steel case (220 x 160 x 85 mm)

0
LC1 Serial interface module, current loop 20 mA
LC3 Serial interface module, options RS-232 or RS-485

0
LR1 Set value relay unit, 230 VAC, 5A, latching and inversion possibility

LS1 Power supply 230 VAC/115 VAC
LS3 Power supply 12 – 24 VDC

0
LP1 Programmer/LCD-display, built-in
LP2 Programmer/LCD-display, hand-held

TPL-300 - 0 - 0 - LS1 - 0